Applicant: Günter Hofer Attorney's Docket No.: 14603-015US1 Client's Ref.: P2003,0026USN

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**AMENDMENTS TO THE CLAIMS:** 

This listing of claims replaces all prior versions and listings of claims in the application:

**LISTING OF CLAIMS:** 

1. (Currently Amended) Control circuitry for use with an oscillator arrangement

for frequency modulation, comprising:

[[-]] a control input (2) for supplying configured to receive a modulation signal;

[[(FSK),]]

[[-]] an oscillator output (3) for tapping a frequency modulated signal,

[[-]] an oscillator (1) with comprising an oscillator input (4) for supplying

configured to receive a feed current and with an oscillator output configured to provide a

frequency-modulated signal; and (3),

[[-]] a an amplitude control circuit for amplitude control (5, 6, 7) with comprising

an amplitude control input that is connected to the oscillator output (3) and with an

amplitude control output that is connected to the oscillator input to provide the (4) for

supplying a feed current for to the oscillator; [[(1), and]]

[[-]] wherein the amplitude control circuit comprises internal circuitry configured

to affect a means for influencing the feed current (6) in dependence on in response to the

modulation signal (FSK), wherein said-means is arranged in the control circuit (5, 6, 7)

and coupled to the input (4) of the oscillator for supplying a feed current.

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2. (Currently Amended) The control circuitry of oscillator arrangement according to claim 1, characterized in that the means for influencing the feed current (6) comprises several parallel connected wherein the internal circuitry comprises current switches that are connected in parallel (10, 11, 12, 13).

- 3. (Currently Amended) The control circuitry of oscillator arrangement according to claim 2, characterized in that the parallel connected wherein the current switches comprise current mirror circuits (10, 11, 12, 13) are arranged in current paths of one respective current mirror (M1, M2, M3, M4, M5) on its output side.
- 4. (Currently Amended) The control circuitry of oscillator arrangement according to claim 3, characterized in that wherein the amplitude control circuit further comprises a gain control circuit and a second current mirror circuit;

wherein the current mirrors (M1, M2, M3, M4 M5) mirror circuits connect the to an output of a the gain control block circuit, the gain control circuit being configured to receive (5) connected to the oscillator output; and

wherein the second (3) with a circuit node (K) in another current mirror (7, 8) that is designed for supplying circuit provides the feed current for to the oscillator input (1).

5. (Currently Amended) The control circuitry of claim 2, further comprising oscillator arrangement according to one of claims 2-4, characterized in that a control

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block (15) is provided that has an input forming circuit, the control circuit comprising the control input (2) of the oscillator arrangement for supplying a modulation signal (FSK) and and an output outputs that are is connected to the control inputs of the current switches; (10, 11, 12, 13),

wherein said the control block circuit is designed for triggering is configured to trigger the current switches in response to (10, 11, 12, 13) in dependence on the modulation signal (FSK).

- 6. (Currently Amended) The <u>control circuitry of claim 1</u> <u>oscillator arrangement</u> according to one of claims 1-5, characterized in that <u>wherein</u> the modulation signal (FSK) is a signal that is digitally coded in accordance with <u>using</u> frequency shift keying.
- 7. (Currently Amended) The control circuitry of claim 1, wherein escillator arrangement according to one of claims 1-6, characterized in that the oscillator (1) is realized in the form of is a tunable oscillator that comprises at least one capacitive circuit capacitance (23) that can be adjusted in response to in dependence on a tuning voltage (V tune) and determines the in order to affect an oscillation frequency of the oscillator.
- 8. (Currently Amended) The <u>control circuitry of claim 1</u>, wherein the oscillator <u>is an inductive-capacitor</u> oscillator <del>arrangement according to one of claims 1-7,</del> <del>characterized in that the oscillator (1) is realized in the form of an LC oscillator that</del>

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comprises <u>a resonant circuit</u>, at least one <del>capacitance (23)</del> <u>capacitive circuit that is usable</u>

<u>to affect</u> that determines the <u>a</u> frequency of the resonant circuit, and at least one

inductance (21) that determines <u>inductive circuit</u> that is usable to affect the frequency of
the resonant circuit.

9. (Currently Amended) The control circuitry of claim 1, wherein escillator arrangement according to one of claims 1-7, characterized in that the oscillator (1) is realized in the form of is a crystal oscillator with comprising an oscillator crystal (16) that determines is usable to affect the oscillation an oscillation frequency of the oscillator.

10. (New) The control circuitry of claim 3, wherein the modulation signal is digitally coded using frequency shift keying.

- 11. (New) The control circuitry of claim 3, wherein the oscillator is a tunable oscillator that comprises at least one capacitive circuit that can be adjusted in response to a tuning voltage in order to affect an oscillation frequency of the oscillator.
- 12. (New) The control circuitry of claim 3, wherein the oscillator is an inductive-capacitor oscillator that comprises a resonant circuit, at least one capacitive circuit that is usable to affect a frequency of the resonant circuit, and at least one inductive circuit that is usable to affect the frequency of the resonant circuit.

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13. (New) The control circuitry of claim 3, wherein the oscillator is a crystal oscillator comprising an oscillator crystal that is usable to affect an oscillation frequency of the oscillator.

- 14. (New) The control circuitry of claim 4, wherein the modulation signal is digitally coded using frequency shift keying.
- 15. (New) The control circuitry of claim 4, wherein the oscillator is a tunable oscillator that comprises at least one capacitive circuit that can be adjusted in response to a tuning voltage in order to affect an oscillation frequency of the oscillator.
- 16. (New) The control circuitry of claim 4, wherein the oscillator is an inductivecapacitor oscillator that comprises a resonant circuit, at least one capacitive circuit that is usable to affect a frequency of the resonant circuit, and at least one inductive circuit that is usable to affect the frequency of the resonant circuit.
- 17. (New) The control circuitry of claim 4, wherein the oscillator is a crystal oscillator comprising an oscillator crystal that is usable to affect an oscillation frequency of the oscillator.